

AMENDMENTS TO THE CLAIMS:

Please cancel claims 1 to 12 without prejudice and add the following claims 13 to 20:

Claims 1 to 12. (canceled)

13. (new) A method for locating and marking flaws on a surface of a three-dimensional object (2), said method comprising the steps of:

a) detecting and locating at least one flaw on the surface of the three-dimensional object by taking at least one picture with at least one optical image-taking device (3,4), so that the at least one flaw appears in the at least one picture;

b) determining at least one location of the at least one flaw on the surface of the three-dimensional object from the at least one picture using design data related to the object (2), optical imaging properties of the at least one optical image-taking device (3, 4), and a position of the at least one optical image-taking device (3, 4) and a position of the object (2) when the at least one picture is taken;

c) transferring the at least one location of the at least one flaw determined in step b) to a marking device (15);

d) determining a start path traversable by the marking device (15) from the design data related to the object (2), from position data and from previously-defined, permissible areas of movement of the marking device (15);

e) moving the marking device (15) over the object (2) to the at least one location of the at least one flaw; and then

f) marking the at least one location of the at least one flaw on the object (2) with the marking device (15);

wherein the at least one optical image-taking device (3, 4), the object (2) and at least one of respective displacement devices (9, 10, 16) for moving the at least one optical image-taking device (3,4), the object (2), and the marking device (15) are three-dimensionally calibrated to each other.

14. (new) The method as defined in claim 13, wherein the at least one location of the at least one flaw is determined with reference to a coordinate system of the object (2).

15. (new) The method as defined in claim 14, wherein the coordinate system is a coordinate system of the design data.

16. (new) The method as defined in claim 13, wherein the at least one location of the at least one flaw is displayed on a display.

17. (new) The method as defined in claim 16, wherein the display is a print-out of a printer or a display screen.

18. (new) The method as recited in claim 13, wherein the position of the object

(2) is exactly determined by comparing the design data and pictures that were taken by the at least one optical image-taking device (3, 4).

19. (new) A marking system for flaws on an object, which are identified during an inspection, said marking system comprising

a marking device (15), said marking device including a plurality of marking heads (17) that are activated independently of each other and a plurality of displacement devices (16) for positioning the marking heads independently of each other; and

a marking controller (18) connected with the marking device (15);

wherein said marking controller (18) automatically assigns at least one location of at least one of the flaws to at least one of the marking heads (17) according to design data for the object, said marking controller (18) controls the displacement devices (16) to position said at least one of said marking heads (17) at said at least one location of said at least one flaw based on said design data related to the object (2) and transmitted position data related to said at least one location of said at least one flaw and said marking controller (18) determines a start path for the marking device (15) from said design data related to the object (2), from position data and from previously-defined, permissible areas of movement of the marking device (15).

20. (new) The marking system as defined in claim 19, wherein the marking heads (17) are distributed over an area of the object that may be marked and the

displacement devices (16) specify distances from the object (2) at which the marking heads (17) are be activated.